bus, Tex. An additional station was also located on the Brazos River, at Hempstead, Tex.

Traffic was uninterrupted on the navigable rivers, except the upper Tennessee, where low water necessitated a suspension of navigation on the 25th.

The highest and lowest water, mean stage, and monthly range at 175 river stations are given in Table VII. Hydro-

graphs for typical points on seven principal rivers are shown on Chart V. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock on the Arkansas; and Shreveport, on the Red.—H. C. Frankenfield, District Forecaster.

## CLIMATE AND CROP SERVICE.

By Mr. James Berry, Chief of Climate and Crop Service Divison.

The following summaries relating to the general weather and crop conditions during July are furnished by the directors of the respective sections of the Climate and Crop Service of the Weather Bureau; they are based upon voluntary reports from meteorological observers and crop correspondents, of whom there are about 3000 and 14,000, respectively:

Alabama.—While the rainfall was deficient over most of the State enough was received to favor growth and final cultivation of crops. Cotton, though comparatively small, made good growth and was fruiting well; bolls were maturing and some opening in southern counties at close of the month. Early and late corn were in good condition, promising an unusually good yield. Minor crops did well and much hay was saved in excellent condition. Fodder pulling was in general progress.—Thomas Crawford.

Arizona.—The weather during July was moderately warm, with considerable cloudiness and frequent showers from the middle of the first decade to the middle of the third decade. The dry weather during the latter half of June and the early part of July began to have an injurious effect upon vegetation, but the showers later in July revived crops and ranges so that they were generally in good condition throughout the rest of the month.—M. E. Blystone.

Arkansas.—The temperature was seasonal, with a slight excess of rainfall. Cotton, while small, made rapid growth, and the bulk of the crop was laid by in fair to good condition. A good crop of early corn was assured; the late was promising, but in some limited sections it suffered from lack of moisture. The thrashing of wheat and oats was well advanced, the yield being light and quality good. Considerable hay of excellent grade was secured. Gardens, pastures, and forage crops were in fine condition; no improvement in apples and peaches.—Edward B. Richards.

California.—Extremely hot weather on the 2d and 3d caused but little damage to deciduous fruits, and was followed by abnormally cool weather most of the month. High winds slightly damaged grain, considerable of which, and also of pasturage and timber were destroyed by fire. Grain harvest was nearly completed in some sections at close of the month. Wheat, oats, and barley were fair crops in the central and northern districts and unusually heavy in southern California. Deciduous fruits were yielding heavily.—Alexander G. McAdie.

Colorado.—The weather conditions were favorable. While precipitation was somewhat below normal, irrigation water was generally sufficient. The harvest of winter wheat and rye advanced favorably, and much spring wheat, oats, and barley was ready to harvest at the close of the month. Corn, potatoes, beets, gardens, and fruits did well. Much native hay was cut and stacked in prime condition, and cutting of the second crop of alfalfa was well under way during the last decade. The ranges afforded excellent pasturage.—F. H. Brandenburg.

Florida.—The month was slightly cooler than the normal, with an excess of more than an inch of rainfall, the latter being fairly well distributed over northern, western, and central counties and over the western portion of the southern district. The rainfall, both in amount and distribution, was generally unsatisfactory in Atlantic coast counties. Cotton made fair progress, though several weeks late; it fruited slowly, but made good stalk. The corn crop promised to be the best for several years; it was laid by mostly during last week of month. Caue, cassava, peas, and minor crops did well. Citrus fruits made good progress, though rainfall was less than the requirements. Many pineapple slips were set out.—A. J. Mitchell.

Georgia.—Rainfall well distributed, but below the average. General conditions most favorable to all farming interests and crops improved materially during the month. Cotton made rapid growth and at the close of the month was healthy and taking on squares and blooms in the northern section, and fruiting in middle and southern divisions, comparatively little shedding being reported. Cane, peas, potatoes, and minor crops made satisfactory progress, the indications being favorable for large yields.—J. B. Marbury.

Idaho.—Weather generally favorable for farming operations, with abundant water for irrigation in most canals until near close of the month, when shortage of water began to cause anxiety in localities. Fruit advanced rapidly, early varieties being abundant and in market. The yield of hay was good. Sugar beets made satisfactory growth.—S. M. Blandford.

Illinois.—The first half of the month was warm and vegetation was greatly stimulated; the latter part was mostly too cool for normal growth. The rainfall was not well distributed, and periods of drought were experienced. Corn made fair advance, but at the end of the month it was estimated to be from two to three weeks backward, and very uneven. A large crop of hay of fine quality was secured. The harvesting of oats was progressing and some thrashing done, the yield being generally below the average. The outlook for apples was not promising.—Wm. G. Burns.

Indiana.—In south section cutting of wheat and oats was practically completed during first half of July, and the bulk of these crops was thrashed before close of month, the yields being fair to very light; in central and north sections cutting and thrashing continued under favorable conditions, with better but not satisfying results, some fields yielding fair to good and others about half crop. An unusually heavy crop of hay was secured, mostly in excellent condition. Corn made normal growth, but was very uneven, much being from one to three weeks late.—
W. T. Blythe.

Iowa.—The month was slightly cooler than usual, with sudden alternations in temperature. Rainfall was excessive in northern section and deficient in southern. General conditions were quite favorable for hay-making and harvesting wheat, oats, rye, and barley. A large crop of hay was secured in best condition. Grain crops were affected by blight and rust and yields lighter than usual, but grain in better condition than last year. Corn late, but made fairly good progress. Potatoes and minor crops did well.—John R. Sage.

Kansas.—Harvesting of wheat, oats, and barley finished, wheat being much better in the west than in the east; oat yield was lighter than expected, but the yield of barley was good. Early corn tasseled, silked, and eared well, and late corn made good growth. Second crop of alfalfa stacked, third crop doing well; prairie hay good. Early apples ripe and abundant in south.—T. B. Jennings.

Kentucky.—Rainfall was unevenly distributed. Drought damaged crops considerably in eastern and some central counties. Cool weather from the 12th to 22d retarded growth of corn and tobacco. General rains about the close of the month greatly improved crops. Corn and tobacco in the western and southern counties were very promising, but they were backward in northern and eastern counties. The yield of wheat was very poor; that of oats and hay was good.—S. P. Gresham.

Louisiana.—Warm, showery weather during the first half of the month caused cotton to grow rapidly, but the showers were so frequent as to prevent cultivation, and the crop suffered some injury from grass, especially on lowland. More favorable conditions prevailed during the latter half of the month and the bulk of the cotton crop was laid by, generally free from weeds and grass, but from two to four weeks late. Sugar cane made vigorous and healthy growth. Rice was promising and harvest commenced in a few parishes. Conditions were generally favorable for the corn crop.—I. M. Cline.

Maryland and Delaware.—Prevailing wet weather interfered somewhat with harvest and several cool spells checked growth, especially of corn. Wheat gave light yields of inferior grade, and rye, barley, and oats were generally short. Timothy improved decidedly, however, and gave fair to good yields. Cornfields were grassy and the crop rather backward. Tobacco was small but healthy and topping had begun. Apples continued promising, and truck, with the exception of melons and cantaloupes, yielded satisfactorily.—Oliver L. Fassig.

Michigan.—The month was generally favorable for crop growth and harvest work, but the last half was too cool for best growth of corn. Hay, wheat, rye, and barley were generally well secured. Sugar beets, oats, peas, potatoes and beans made good progress and apple prospects continued promising.—C. F. Schneider.

Minnesota.—Crops in north revived by rains of 1st to 4th and locally benefited by rains of 9th; rains of 27th were too late for early crops; elsewhere too much rain flooded lowlands and caused rank growth of spring wheat, oats, and barley, with lodging and tendency to rust. Local wind, rain, and hail storms on the 7th, 9th, 16th, 20th, and 27th, with aggregate loss exceeding a million dollars. About the 15th rye and early barley were being cut and early oats and winter wheat ripening. On the 31st all the rye and most of the barley and winter wheat were cut, while spring wheat and early flax were ripening rapidly in south half of the State. Corn growth was retarded by wet and cool soil. The hay crop was light in north and abundant in south. The flax crop was good in many places.—T. S. Outram.

Mississippi.—Cotton generally made a healthy and rapid growth and at the close of the month was blooming and fruiting nicely, although late and smaller than usual. The corn crop was the best in years; the early matured well and the late was very promising. Sugar cane, sorghum, peas, rice, and potatoes made a splendid growth. The hay crop was excellent and pastures good. Peaches were fair in south, but poor in north. Apples did well.—W. S. Belden.

Missouri.—The temperature was generally favorable for growing crops, but in most sections the rainfall was insufficient. Corn, which was very uneven and generally late, suffered to some extent from lack of moisture during the latter part of the month, and the condition of the crop, as a whole, was much below the average. Other crops were also injured by drought in localities. The month was very favorable for harvesting and haying, however, and wheat, oats, and hay were secured in good condition.—A. E. Hackett.

Montuna.—The month was wet and cool, and the maturing of winter grain was retarded somewhat, but the conditions were fairly favorable for spring grain. Haying was general at the end of the month, but was frequently interrupted by showers, a yield below the average being indicated. The first crop of alfalfa was secured and was fairly good; the second crop advanced rapidly and was very promising. The potato crop was unusually good. Ranges improved.—Montroe W. Hayes.

Nebraska.—A very favorable month for harvesting in spite of the ex-

Nebraska.—A very favorable month for harvesting in spite of the excessive rainfall, and most winter wheat and oats in the southern part of the State were secured in good condition; thrashing and stacking progressed well; the yield of winter wheat was less than expected, and oats were rather light, both in yield and weight. Corn did not grow sufficiently fast to regain the ground lost early in the spring by unfavorable conditions. Early corn was in tassel by the last decade of the month, but much of the crop was from two to three weeks later than usual.—
G. A. Loveland.

Nevada.—The month on the whole was unusually cool and remarkably dry, being drier than any July in the last fifteen years. Irrigation water was quite plentiful throughout the month, and crops of all kinds made rapid and satisfactory progress. A heavy first crop of alfalfa was cut and saved in prime condition, and a fine second crop assured. The grain crops never looked better at this time of the year, and fruit prospects were the best in many years.—J. H. Smith.

New England.—The first part of the month was warm, and the weather generally favorable to crops; the latter part was cool, with much cloudiness, and frosts occurred in some northern sections. While the precipitation was deficient it was well distributed through the period and over the territory. The season was from ten days to a fortnight behind the average, and crops correspondingly retarded.—J. W. Smith.

New Jersey.—Nights were generally cool, retarding the growth of vine truck and corn, especially watermelons, cantaloupes, cucumbers, and lima beans. The late planted corn made poor progress, the fields being very uneven. Frequent showers, very heavy in places, prevented cultivation in many localities, the ground being too wet to work. Harvesting of grain and hay proceeded slowly.—Edward W. McGann.

New Mexico.—Month was characterized by the absence of the usual rains. However, owing to the unusual and heavy rains in June crops did not suffer much excepting toward close of month. Stock was in excellent condition, but ranges were getting dry toward end of month.—R. M. Hardinge.

New York.—First half of month was very favorable, but frequent rains and low temperatures during latter half were very detrimental. By end of month hay had improved sufficiently to warrant an estimate of full crop, and wheat and rye were mostly cut and saved, the yield being good. Oats and barley were promising, but corn was decidedly backward. The prospects for beans and hops on the whole were favorable. Tobacco, buckwheat, and potatoes, were vigorous. In the Chautauqua grape belt and the Keuka section a light yield of grapes was indicated. Apples varied widely in different sections, the crop being less than the average generally, and other fruit was light. Pastures were very good.—R. G. 410cm.

North Carolina.—The weather was very favorable for crops and for all kinds of farm work. The rainfall was sufficient, except during the last decade, when drought began to cause considerable injury to upland corn. Cotton improved steadily; blooms appeared the first week of July, and by the close plants were blooming freely everywhere and fruiting well. Corn did well, late corn being especially promising. Tobacco began to ripen and curing advanced rapidly, but with yield inferior to last year's in weight and quality. Sweet potatoes, rice, peanuts, and peas did well. Only in limited sections did fruit give an average yield. Melons were late and inferior. A good crop of hay was saved.—C. F. von Herrmann. North Dakota.—Weather conditions were generally unfavorable for

North Dakota.—Weather conditions were generally unfavorable for crops. While some sections had an average amount of rain, the greater part of the State did not receive enough and crops suffered severely. In many sections early grain was so damaged that some was plowed up, and but few crops, except flax, were in a promising condition at the close of the month. Light frosts during the last week did slight damage to tender vegetation.—B. H. Bronson.

Ohio.—The month was slightly cooler than the normal. The precipitation was in excess in the north, but deficient in other sections, particularly in the southwest. The number of cloudy days was very small. At

the close of the month crops were affected by drought in central counties. Grain yield was disappointing, the hay crop large, corn very poor. Other field crops and apples fair and peaches small.—J. Warren Smith.

Oklahoma and Indian Territories.—Early corn made and late filling well where rains occurred. Cotton made good growth, formed squares, bloomed, and fruited well, and was in a fair to good condition. Wheat and oat harvest completed. Cane, kaffir and broom corn, castor beans, June corn, and millet in good condition. Barley, alfalfa, millet, and hay secured, good yields. Early potatoes secured, fair to good yields; late potatoes planted. Early fruit light to fair yields; late fruit promising.—C. M. Strong.

Oregon.—The month was cooler than usual. Scattered showers during the first decade were beneficial to all crops. At the close of the month the fall wheat harvest was well advanced and the cutting of spring wheat had begun; the yields were below the average, but the quality was excelent. Potatoes, gardens, and fruit of all kinds made good progress. Hops continued backward, but were otherwise promising. An average hay crop was secured in excellent condition.—Edward A. Beals.

Pennsylvania.—The month, as a whole, was both cool and wet—conditions generally unfavorable to haying, harvesting, and maturing of growing crops. Continued low temperatures and lack of sunshine materially retarded the development of tobacco and late corn and potatoes. Frequent showers prevented the cultivation of the last-named crops and damaged much wheat, rye, and hay after cutting, but the rains brought about such a rapid improvement in grasses that what had promised to be a light hay crop was practically up to the average in most sections.—
T. F. Townsend.

Porto Rico.—Weather conditions were generally favorable and all crops did well. Cane improved materially in color and was in good condition. Coffee matured well. Some land was prepared for tobacco. A good corn crop was harvested, but bean crop was generally light. Rice was promising. Land was prepared for the August planting of small crops and gran cultura. Pasturage was good and abundant.—E. C. Thompson.

South Carolina.—The even warmth was favorable to crops during the greater part of the month, but excessive heat during the last week, in connection with unusually low humidity and general absence of rain, was detrimental to all vegetation. These conditions hurt corn severely where in the silking stage and also caused "fireing." Cotton suffered on sandy lands. Tobacco harvest progressed favorably. Minor crops did fairly well.—J. W. Bauer.

South Dukota.—Crops made favorable progress. By the 31st spring wheat harvest was general, barley harvest was closing, and oat and spelt cutting were far advanced, with wheat indicating variable, and rye, barley, oats, and spelt good yields; some barley was discolored. Frequent rains somewhat retarded harvesting and haying and lodged considerable grain, and rust affected some wheat and oats. Corn, flax, and potatoes made thrifty advance. Pastures, hay grass, and late small grains were improved and early wheat and oats natured fast.—S. W. Glenn.

Tennessee.—The rainfall came in scattered showers, but nearly all sections received sufficient to keep crops growing well. The temperature conditions were favorable. The hay crop was fine, corn very promising, and cotton late, but the latter grew rapidly and began to fruit. Tobacco was mostly topped and in good condition. Gardens and grapes were very promising and a fair crop of apples was expected; peaches were scarce and inferior. The wheat crop was short, but the yield of oats was fairly good.—H. C. Bate.

Texas.—Some damage was done by drought in the western portion and in the western counties of the north portion, but east of the one hundredth meridian there was generally an excess of rainfall. Temperature conditions were generally favorable for crop development. Cotton made rapid growth, but was between two and four weeks late in the middle and northern portions at the close of the month; during the latter half the plants fruited nicely and many fields were laid by in good condition. Bolls began to open in the southwest portion during the second decade; boll weevil did considerable damage during the first week, but apparently little damage after that. Conditions were generally ideal for corn assuring a large yield. Thrashing progressed rapidly, and wheat, barley, rye, and fall oats turned out well; the yield of spring oats was light. Rice and sugar cane did exceptionally well.—L. H. Murdoch.

Utah.—The weather was warm and dry, with an abundance of sunshine. Scattered thunderstorms, some destructive in character, occurred at different periods, but the precipitation was generally light and insufficient. The long continued dryness seriously affected the supply of irrigation water, and reservoirs and ditches were becoming very low; where properly irrigated crops made rapid growth, but on dry farms they suffered serious deterioration from lack of moisture. Fall wheat, barley, and rye were being harvested. Spring wheat and oats were heading rapidly. The second crop of alfalfa was being gathered, with yields below the average. Sugar beets were in good condition where properly irrigated. Early planted corn was in silk and tassel. Fruit was generally good, excepting apples, which were inferior in quality. Ranges were drying up.—R. J. Hyatt.

Virginia.—Weather conditions were generally favorable for crop growth. The temperature was seasonable, and the rainfall sufficient and well distributed. Harvest of winter wheat and oats was finished early in the month and spring oats secured by the latter part. Corn made

excellent progress, while tobacco began to "button" and considerable topping was done. Haying was carried on under favorable circumstances and a generally good crop secured. Apples were promising at the close of the month.—Edward A. Evans.

Washington.—Unseasonably cool weather predominated, with heavy

Washington.—Unseasonably cool weather predominated, with heavy rainfall during the first week, but, on the whole, it was favorable for the staple crops. Haying was delayed until 7th, and there was some slight damage, but a good crop was secured. Fine weather for maturing and harvesting winter wheat, and for the growth and filling of spring wheat and oats. Barley and winter wheat yields were below the average in general, although there were some good fields.—G. N. Salisbury.

West Virginia.—There was a marked improvement in corn during the hot weather of the first two weeks. Wheat and rye harvest was practically completed during the third week. At the close of the month haying was well advanced, the crop being rather poor. Corn was making very good growth and mostly laid by, but very uneven. Both Irish and sweet potatoes were promising. There were practically no peaches, pears,

In the following table are given, for the various sections of the Climate and Crop Service of the Weather Bureau, the average temperature and rainfall, the stations reporting the highest and lowest temperatures with dates of occurrence, the stations reporting greatest and least monthly precipitation, and other data, as indicated by the several headings.

The mean temperatures for each section, the highest and

or plums, and only a few apples, except in panhandle and some southern counties, but grapes were promising.—E. C. Vose.

Wisconsin.—Month was cooler than usual, except along southern and eastern borders, with decidedly cool periods on the 15th and 31st, freezing temperatures being reported from a few stations in the northern section on these dates. The precipitation was heaviest in the northwestern counties, amounting to nearly 10 inches at some places. There was some damage to hay and other crops by the heavy and frequent rains, but with the exception of corn, crops generally were in satisfactory condition at the end of the month, corn being vigorous and healthy but backward.—W. M. Wilson.

Wyoming.—The first week was unusually cold and damaging frosts occurred in some agricultural sections. Warm weather prevailed in the middle and last decades, but the temperature excess was slight. All crops were late. A good first crop of alfalfa was secured, and the harvest of native hay was commenced by close of month.—W. S. Palmer.

lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation. Of course this number is much smaller than the total number of stations.

Summary of temperature and precipitation by sections, July, 1903.

Section.	Temperature—in degrees Fahrenheit.								Precipitation—in inches and hundredths.					
	Section average.	Departure from the normal.	Monthly extremes.						rerage.	e from mal.	Greatest monthly.		Least monthly.	
			Station.	Highest.	Date.	Station.	Lowest.	Date.	Section average.	Departure from the normal.	Station.	Amount.	Station.	Amount.
Alabama	80. 0	-0.2	(Evergreen	102	1) 24(	SFloreuce	54	147	3, 98	-1.04	Daphne	7. 22	Haleysville	1. 25
Arizona	82.9	-1.1	Lock No. 4	102 117	5	Valley Head Fort Defiance	54 33	15∫ 4	1, 17	-0.70	Fort Huachua	3.76	Aztec	T.
Arkansas	79. 6	-0.6	Oregon	105	7	Dodd City	53	13	3, 90	+0.10	Prescott	8. 27	Silver Springs	1.31
California	71.2	$\begin{array}{r r} -3.8 \\ +2.5 \end{array}$	Imperial	121	12	Bodie	15	19	Т.	-0.03	Motague	0. 25	Many stations	0.00
Colorado	67. 6 81. 1	-0.6	Blaine	111 105	2, 16	Antelope Springs 5 stations	23 60	4	1. 57 6. 46	$\begin{bmatrix} -0.61 \\ -1.03 \end{bmatrix}$	Wray Pensacola	5. 16 4. 39	Rockyford Fernandina	0.42
Georgia	80.0	0	Eastman	103	23	4 stations	52		4.00	-1.95	Dudley	9. 34	Hephzibah	1, 12
Idaho	<b>63.</b> 3		Lewiston	105	22	Chesterfield Silver City	$\frac{27}{27}$	3₹ 14€	0. 86		Dickey	2. 50	\{\langle Albion\} \{\langle Black foot\}	7
Illinois	75. 7	-0.4	SBenton	102 102	257 80	Kishwaukee		30	3. 90	+0.15	Zion	9. 45	Centralia	,
Indiana	74.8	-0.8	Crawfordsville	101	10	Auburn	45	15	3. 44	+0.09	Huntington	7. 39	Marengo	0. 82
Iowa	72, 9	-1.5	Thurman Sigourney	100 100	97 27	Chester	40	31	4. 83	+0.91	Elkader	12. 72	Belknap	
Kansas	78.3	- 0.3	Forsha.		22	3 stations	44	4	3. 17	~0.25	Moran	10. 42	Englewood	1
Kentucky	77. 5	+0.1	Owenton		9	Loretto	49	14	3. 53	-0.69	Manchester	6. 41	Bardstown	
Louisiana	80.8	-0.8	{Libertyhill	103 103	227	Mansfield	54	14	6, 14	+0.49	Lafayette	11.00	Franklin	2. 29
Maryland and Delaware.	74. 6	-0.9	Great Falls, Md Seaford, Del	100	2,10,307	Deer Park, Md	36	5, 20	5. 48	+1.49	Chewsville, Md	8. 85	Dist. Res., D. C	3.56
Michigan	67. 9	-1.1	Owosso	99	3	Baraga and Wetmore		.1	3.97	+0.60	Iron River	9.50	Lake City	0.17
Minnesota		-2.6	New Ulm	96 103	27	Leech Lake Dam	26	11	5. 11	+1.50	Milaea		Angus	0.87
Mississippi		-0.2	?Okolona	103	25	Yazoo City	51	14	4, 69	-0.53	McNeill	11.05	Tupelo	0.58
Missouri	77.4	+0.2	Princeton	102	10	Conception and Maryville.	51	31	3, 22	-1.06	Willow Springs	8. 56	Rolla	0.78
Montana	64. 4	-3.1	Miles City	104	22	Wolsev	28	4	2, 81	+1.21	St. Peter	5, 89	Butte	0.65
Nebraska Nevada	73. 0 65. 4	-1.8 $-4.8$	Beaver City Rioville	103 111	9 28	Kimball	41 26	$\frac{3}{7}$	4. 94 0. 01	$\begin{array}{ c c c c c } +1.42 \\ -0.43 \end{array}$	Genoa	9, 90 0, 30	Auburn	1.01
New England*	68. 1	-0.7	North Bridgeton, Me		28	Orono, Me	34	27	3, 66	-0.43 -1.01	Fenelon	7.16	31 stations	0.00
New Jersey	73. 3	-0.9	Bridgeton	100	2	Charlotteburg	38	28	5. 51	+0.32	Atlantic City	10.14	Ringwood	3.08
New Mexico	73.4	+0.1	Alamogordo 5Oyster Bay	109 98	8	Winsors	26	4	0.85	-1,90	Winsors	3. 75	Engle	T.
New York	67. 7	-1.3	}Primrose	98	105	Axton	31	28	4. 20	+0.30	Number Four	10.03	Southampton	
North Carolina North Dakota	78. 1 66. 7	+0.4 $-1.3$	Moncure Wishek	102 109	26 23	Franklin (near) Mayville	41 26	14 31	$\frac{3.79}{2.13}$	-1.71 $-0.50$	Whiteville	8, 99 5, 72	Henrietta	0. 21 T.
Ohio	<b>72.</b> 9	-0.9	Warsaw	104	25	5 stations	42 42	16) 23	3. 67	-0.08	Hudson	7. 70	Bloomingburg	1.18
Oklahoma and Indian Territories.	81. 2	+0.5	Ural, Okla	116	24	(Wooster	44	4	2, 55	-1.12	Durant, Ind. T	10, 89	Fort Sill, Okla	0.00
Oregon	63. 5	-2.2	Umatilla	107	20	Deschutes	28	14	0.52	0.00	Bull Run	1, 93	4 stations	0.00
Pennsylvania		-0.9	Mauch Chunk	98 98	100	Dushore	35	28	5. 36	+0.72	Pottsville	8, 81	Harrisburg	
Porto Rico	79. 3	l	Cayey	99	181	Cidra	50	23	7. 44		La Carmelita	15, 20	Barros	2, 60
South Carolina	80.4	+0.3	Florence, Gaffney	103	27	Walhalla	45	16	3.59	-1.99	Gillisonville	8.54	Winthrop College	0.95
South Dakota	70.5 77.8	$\begin{array}{c c} -2.0 \\ +0.2 \end{array}$	4 stations	105 102	$\begin{bmatrix} 6,24,27 \\ 22 \end{bmatrix}$	3 stations	38 44	29-31 16	4. 19 3. 80	+1.55 -0.65	Sisseton Agency Bristol	8. 35 7. 92	Leola	1. 29
Texas	81, 4	-1.9	College Station	1102	24	Makinnov	51	2	5. 81	-0.65 +3.41	Marlin	7. 92 17. 72	Pope Comanche	0. 97 T.
Utah	71.0	-1.6	Loa	110	20	Woodruff	27	4	0.52	+0.03	Soldier Summit	2, 00	4 stations	0,00
Virginia	75, 5 63, 2	-1.0 -2.4	Newport News Zindel	101 109	24 20 30 22	Burkes Garden Wilbur	38 30	6 14	$\frac{3.87}{1.01}$	-0.72 + 0.12	Callaville Ilwaco	7. 95	Barboursville Pasco	
West Virginia	75, 5	-1.1	Charleston	100	107		- 1	14				3, 58	1	0.00
•	69.1		Webster Springs !	100	280	Travelers Repose	37		3. 74	-1.19	Terra Alta	8. 30	Huntington	1. 82
Wisconsin		-1.1 -1.6	Prairie du Chien Basin	99 107	29 26	Tomahawk South Pass City	31 18	31 3	6.13 $1.42$	$+2.20 \\ +0.16$	Butternut Thermopolis	9. 88 5. 81	Oconto Lander	2.14 0.21

<sup>\*</sup> Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.